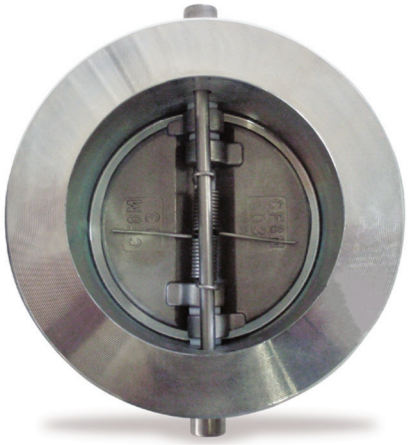
dual plate check valve
series CH020

RED LINE

marine and offshore industry,
petrochemical industry,
general plants

Retainerless Type



Retainer Type

CE In compliance with PED 97/23/EC

TECHNICAL DETAILS

Wafer design, Lug and double flanged upon request

Self-centering

Low pressure drops

Easy to install and maintainance

Materials: zinc plated carbon steel body; stainless steel AISI 316, discs in AISI 316L/CF3M

Metal/metal seat EPDM - VITON - BUNA

Series DN50 – DN 500

suitable for flanges UNI PN 10-40 ANSI 150-600

Face to face according to EN 558 – 1,16

Pressure test conform to API 598

Special executions upon request

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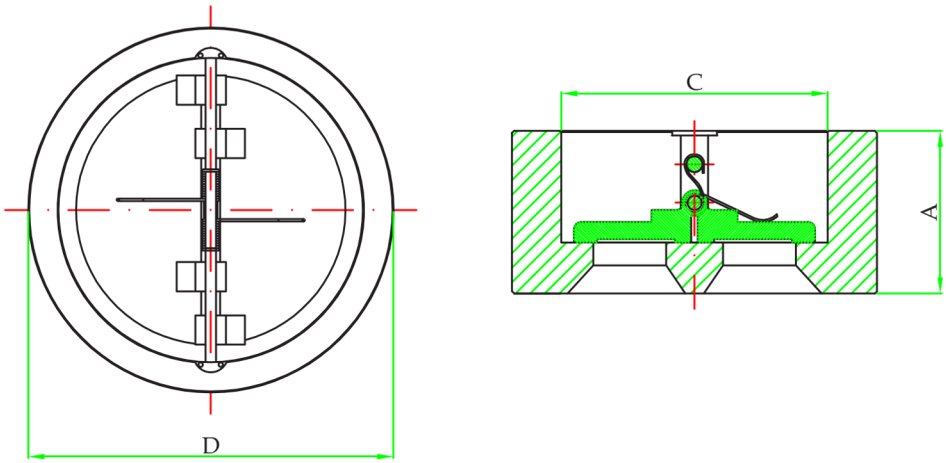
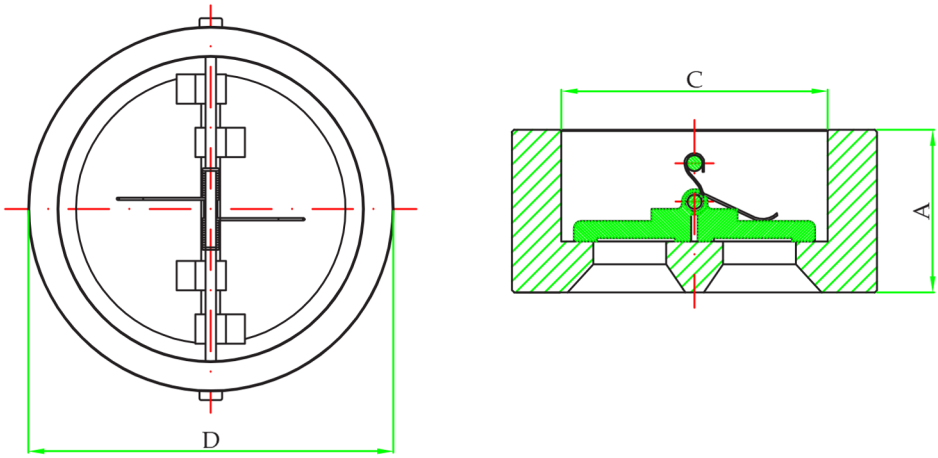
TECHNICAL DRAWINGS

Retainerless Type



Retainer Type



DIMENSIONS

DN		ØC	A	ØD PN10	ØD PN16	ØD PN25	ØD PN40	ANSI 150		ANSI 300		ANSI 600	
mm	inch							A	ØD	A	ØD	A	ØD
50	2”	65	43	109	109	109	109	60	105	60	109	60	110
65	2” 1/2	80	46	129	129	129	129	67	124	67	129	67	127
80	3”	94	64	144	144	144	144	73	137	73	144	73	147
100	4”	117	64	164	164	170	170	73	175	73	178	79	193
125	5”	140	70	195	195	198	198	86	195	86	213	98	239
150	6”	170	76	220	220	228	228	98	220	98	248	137	264
200	8”	224	89	275	275	285	293	127	279	127	306	165	318
250	10”	265	114	330	330	340	355	146	340	146	360	213	398
300	12”	310	114	380	387	403	420	178	410	178	420	229	455
350	14”	370	127	440	448	460	477	178	448	178	484	273	489
400	16”	430	140	490	495	514	549	190	514	232	539	305	563
500	20”	530	152	595	617	624	631	219	605	292	653	368	679

TECHNICAL DETAILS

PRESSURE DROP CHART

The chart is valid for water at 20°C; for other fluids, the equivalent water volumeflowrate must be calculated and used in the chart.

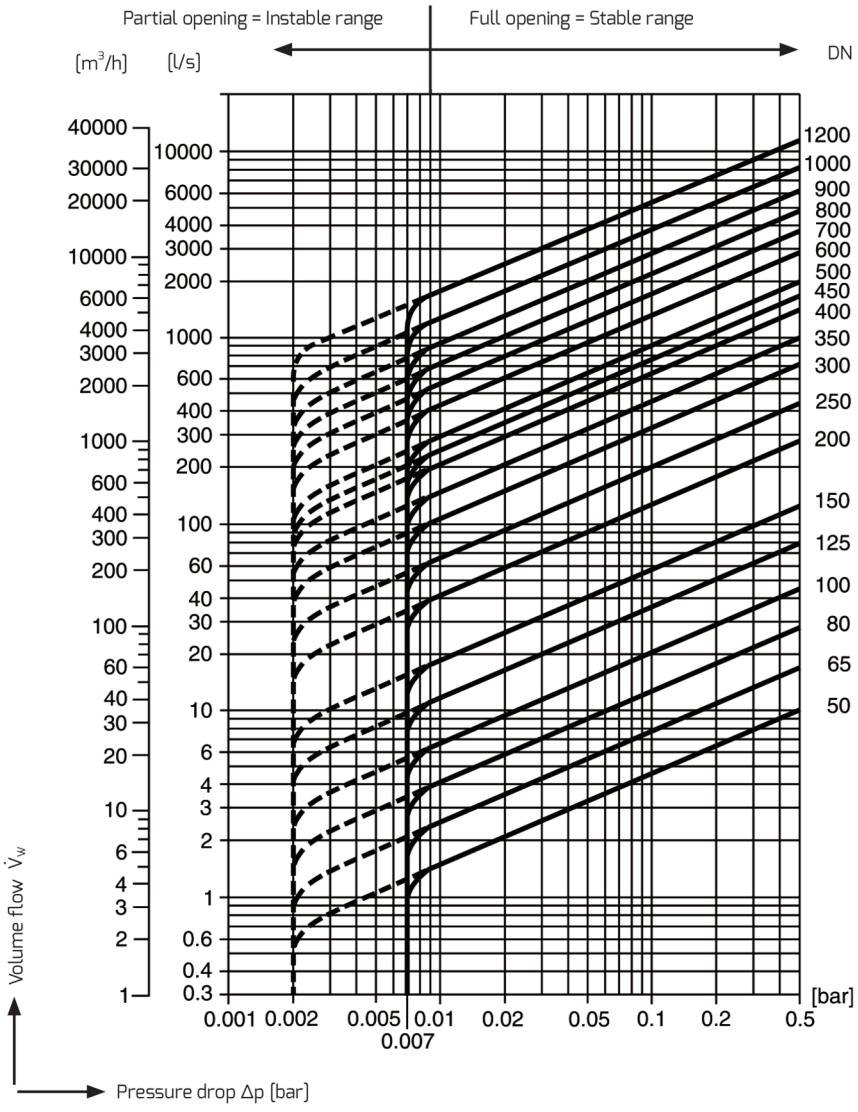
$$\dot{V}_w = \dot{V} \cdot \sqrt{\frac{\rho}{1000}}$$

$\dot{V}_w$ = Equivalent water volume flow in [l/s] or [m³/h]

ρ = Density of fluid (operating condition) in [Kg/m³]

$\dot{V}$ = Volume flow of fluid (operating condition) in [l/s] or [m³/h]

Note



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series CH020

TECHNICAL DETAILS

FLOW CHARACTERISTICS

Valves in horizontal lines.
Flow with water at 20°C.

DN		Fully open
mm	inch	K_{VS} - Value [m³/h]
50	2”	58
65	2” 1/2	95
80	3”	150
100	4”	238
125	5”	390
150	6”	600
200	8”	1439
250	10”	2200
300	12”	3800
350	14”	5000
400	16”	7100
450	18”	8400
500	20”	10180
600	24”	14000
700	28”	20000
800	32”	25400
900	36”	31000
1000	40”	42000
1200	48”	60000

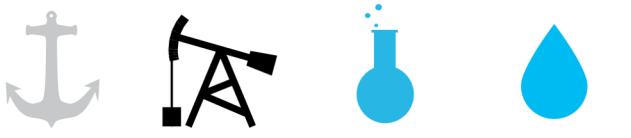
C_V (U.S.) = 1.17 · K_V

C_V (U.K.) = 0.98 · K_V

OPENING PRESSURES

DN		Opening pressures [mbar] with upward flow	
mm	inch	without springs	with springs
50	2”	6	13
65	2” 1/2	6	13
80	3”	7	14
100	4”	7	14
125	5”	10	17
150	6”	11 (15)	18 (22)
200	8”	12 (18)	19 (25)
250	10”	14 (18)	21 (25)
300	12”	15 (25)	22 (32)
350	14”	17 (25)	24 (32)
400	16”	19 (25)	26 (32)
450	18”	22	29
500	20”	23 (28)	30 (35)
600	24”	24 (31)	31 (38)
700	28”	29	36
800	32”	35	42
900	36”	41	48
1000	40”	43	50
1200	48”	47	54

APPLICATIONS



MARINE AND OFFSHORE INDUSTRY | PETROCHEMICAL INDUSTRY | CHEMICAL INDUSTRY | WATER INDUSTRY